

ribands of spawn are fixed to stones and rocks, and comparatively rarely to substances which could be easily transported by the waters. Although indeed we may be acquainted with or may easily imagine numerous methods of dispersal and distribution, there must evidently be many others we do not dream of, which are nevertheless common and effective.

I need hardly add that I have careful drawings, as well as specimens, of all the above-mentioned species of Nudibranchiata, which I hope to be able to publish at some future day. They have already (the drawings at least) had the advantage of being inspected by Mr. A. Hancock, who has kindly given me some valuable hints concerning them.

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XV.—*Remarks on the Names applied to the British Hemiptera Heteroptera.* By FRANCIS P. PASCOE, F.L.S. &c.

MESSRS. DOUGLAS and SCOTT having kindly undertaken to prepare for the Entomological Society a list of British Hemiptera, I should like to make a few observations on the names adopted by them, or rather on the principles which led to their adoption, in their well-known work*. In no other order of Insects is there so great a discrepancy in the nomenclature—Fieber, Flor†, Dallas, Bärensprung, Dohrn, and others agreeing only to differ. It will therefore be useful, I think, to examine the causes which, to a certain extent, have led to this result. The study of the Hemiptera is limited at present to comparatively few entomologists; and until “unnecessary genera” shall have been ignored by common consent, no uniformity can be hoped for. Putting this cause aside as one that will gradually disappear, there remain two faulty principles at work, and, singularly enough, among hemipterologists only, viz.:—(1) the application of the generic names of the older authors to obscure, sometimes extra-European species, instead of to the larger number of better-known species which those authors must have had most prominently before them, thus rendering the use of new names necessary; and (2) giving new names to such genera as were formed by the union of two or more genera of a preceding writer.

As an example of the first of these principles, we will take the old name of *Cimex*, under which Linnæus was content to

* The British Hemiptera, vol. i.: Hemiptera-Heteroptera. 1865 (Ray Society).

† I have not quoted this author because he uses a trinomial nomenclature which is rather difficult to explain.

include all the Hemiptera Heteroptera known to him, putting *C. lectularius* at their head. Fabricius, who seems to have delighted in capricious changes, then applied it to various forms of Scutelleridæ, Pentatomidæ, &c., Fieber eventually retaining it for *Pentatoma vernale* and its allies *prasinum* and *dissimile*: but it is rejected altogether by Messrs. Douglas and Scott as well as by H. H. Dohrn, Flor, and Bärensprung. In its old classical sense, as Linnæus doubtless intended it, it keeps its place in the works of Latreille, Westwood, Blanchard, Gerstaecker, and apparently in most authors conversant with general entomology. With one exception, that can be satisfactorily accounted for and need not be explained here, there is not a single Linnean genus, so far as I know, in the whole animal kingdom, that has not been adopted by zoologists; and the rule has been, apparently, to take the best-known species, which have been generally the commonest, as the types of the illustrious Swede. Why the Fabrician name *Acanthia** should have been preferred, it is difficult to say, seeing that species belonging to various modern genera are included under it, and therefore that it is as indefinite (if that be the objection) as the Linnean *Cimex*. In the same way *Cydnus*, Fab., has been discarded entirely by Messrs. Douglas and Scott, who refer the single British species retained under that name by Dr. Fieber to *Sehirus* of Amyot and Serville, who in their turn get rid of *Cydnus* by applying it to an obscure Indian insect. Again, Mr. Dallas, in his British Museum List, gives the name of *Æthus* to the *Cydnus* as understood by Fieber, and applies *Cydnus* to another genus—*Brachypelta*. Dr. Gerstaecker takes *C. morio* as the type, a species placed by Fieber under *Sehirus*, and by Bärensprung, who adopts the latter genus, under *Cydnus*: the difference between the two genera cannot be very great; and *Sehirus*, therefore, may as well sink. *Tetyra*, another Fabrician genus, is converted into *Eurygaster* by Dr. Fieber, who is followed by Messrs. Douglas and Scott: Drs. Gerst-

* Looking a little further into this genus *Acanthia*, we find that Fabricius proposed it in 1794 in his Ent. Syst., *Cimex lectularius*, the first species, being followed by forty-four more; in 1803, in his Syst. Rhyng., he confines it to two species, the first keeping its place and a new one added, the rest being dispersed. But in 1796, Latreille, in his Précis de Caract. &c., had so defined the genus as to limit it to the species for which Fabricius afterwards proposed the name of *Salda*. Furthermore, Latreille, in his Hist. Nat. des Crust. et des Ins. (published in 1802), redescribes the genus, giving *Acanthia zosteræ* (Fabricius's second species in the Ent. Syst.) as the type, leaving the first as the true type of *Cimex*. In this he was followed by Germar, Curtis, and Westwood, *Salda* to them being a synonym of *Acanthia*. It would be increasing the confusion if it were now attempted to restore *Acanthia* to the place to which its priority entitles it; the best that can be done is to drop it altogether.

aecker and Bärensprung, as well as Prof. Westwood, adopt the older name, with *T. maura* as the type. *Asopus*, Burmeister (a collective name for genera not otherwise admitted by its author), having for its type the well-known *Zicrona cærulea*, is limited by Dr. Fieber to one of the three species forming Hahn's genus *Arma*—*A. lurida*; by Bärensprung it is applied to *Cimex punctatus*, Linn. (*Rhacognathus*, Fieb.), a British species, and by Dohrn to two extra-European forms. Fieber, in his generic table, uses the word "*Podisus*," which would have been unobjectionable if the genus (which is very slightly differentiated from *Arma* by the comparative length of the joints of the antennæ) is to stand; it does not, however, seem likely to do so.

As examples of the second principle, I may mention the following:—1. *Hypnophilus*, a new name for the combined genera *Macrodema* and *Ischnocoris*, neither of which appears to be satisfactorily differentiated from *Pterotmetus*, Amy. & Serv.; indeed Dr. Dohrn (erroneously, I think) includes them under *Rhyparochromus*. 2. *Lopomorphus*, combining *Acetropis* (in pt.) and *Leptopterna*, Fieb. 3. *Litosoma*, a collective name for four of Fieber's genera. 4. *Sphyracephalus* (since changed, the name having been preoccupied) for two more genera. 5. *Idolocoris*, the same. It would also be satisfactory to know why Mr. Scott's *Monosynamma* was discarded for *Neocoris*, and *Macrophysa*, Westw., was rejected for the later name of *Zygonotus*. Whether *Allodapus* and *Halticus* should be changed because of a prior *Allodape* and *Haltica*, respectively, is a matter of opinion; if the objection is a valid one, then numerous changes in all branches of natural history are inevitable—the change of three at least of Messrs. Douglas and Scott's above-mentioned genera among them (*Hypnophilus*, *Litosoma*, and *Neocoris*).

Another most unaccountable perversity is the substitution by so many entomologists of *Hydrometra* for *Gerris*. The latter name was first used by Fabricius in 1794 (Ent. Syst.); in 1796 Latreille, in his 'Précis,' separated one of the species (*Cimex stagnorum*, Linn.) under the name of *Hydrometra**; and this genus was afterwards more systematically treated in his 'Histoire' (1802). But in 1803 Fabricius (Syst. Rhyng.) quietly appropriates this name for the greater part of the species which he had formerly placed under *Gerris*, the latter being reserved for a few, mostly exotic† species. He still,

* *Gerris* is very clearly separated (*inter alia*) from *Hydrometra* by the "four posterior legs long, the anterior short" (p. 86).

† One common European species (now *Plealaria vagabunda*) was retained in the altered condition of *Gerris*, and, according to the general rule alluded to above, this was considered by Burmeister to represent the true *Gerris*

however, saw no objection to keeping two forms so very distinct (Fieber refers them to different families) as *Hydrometra stagnorum* and his old *Gerrides* in the same genus and thus entirely ignoring Latreille's more critical acumen, although he was perfectly aware of the fact, as he adds, under *Hydrometra stagnorum*, "*Hydrometra* Latr. Ins." Dr. Fieber quotes *Hydrometra*, "Fab. S. R. Gen. 37," *Gerris* being added as a synonym, which it certainly is not if the "S. R." is to be also quoted for it. In the midst of all this most unnecessary confusion, Dr. Burmeister slips in with a new name (*Limnobates*) for this *Cimex* = *Gerris* = *Hydrometra stagnorum*. If anything like a law of priority is to be retained, *Hydrometra* must be confined to *H. stagnorum*, *Gerris* reverting to its original members; and this may be said for other names besides those mentioned in these remarks, but which, as they do not apply to British species, need not be examined here.

XVI.—Notes on the Sexes of the *Cocytus* Group of the Genus *Adolias*. By A. G. BUTLER, F.Z.S.

SINCE writing my remarks upon *Cocytus* and its allies, I have made a rather important discovery as regards the sexes of some of the species of *Adolias*.

Dr. Felder (Wien. ent. Monatschr. v., December 1860) has described the male of Moore's *A. Puseda*; at the end of the description he adds the following observation:—"Auctor hujus speciei fœminam tantum cognovit et propter signaturas in sectionem *A. palungæ*, *pulasaræ* &c. palpis distinctissimam locavit. *A. Cocytus* Fabr. proxima autem ejus affinis est." Moore should, however, have placed the *Cocytus* and *Ambalika* groups together, the former being the males of the latter.

I had previously separated the sexes, both male and female, as being possibly distinct species; and now that I have been enabled to match them, I find that in almost every case we received the opposite sexes together, and from the same collections; a comparison of the underside markings shows similar modifications of pattern in both sexes. The following alterations will therefore have to be made in this genus:—

1. ♂. *Adolias Cocytus*, Fabricius.
- ♀. *Adolias Gopia*? var., Moore.

Siam (Fabr.); Assam. ♂ ♀, B.M.

in its, for the second time, contracted sense. Except for this what is now with all entomologists a synonym, *Gerris* would disappear with these authors altogether from the European list.